



REGIONAL PERMIT

US Army Corps
of Engineers
Albuquerque District
4101 Jefferson Plaza, NE
Albuquerque, NM 87109-3435

Fax No. 505-342-3498

Regional Permit No:	Issuance Date:
NM-97-00476	March 6, 1998
Phone:	Expiration Date:
(505) 342-3283	March 6, 2003
In Reply Refer to:	

District Engineer, ATTN: CESPA-OD-R

REGIONAL PERMIT UNDER SECTION 404 OF THE CLEAN WATER ACT (33 USC 1344) for STREAM HABITAT IMPROVEMENT STRUCTURES IN THE STATE OF NEW MEXICO

Purpose of this Regional Permit: The purpose of this regional permit is to authorize the placement of stream habitat improvement structures into Perennial Waters of the United States within the State of New Mexico. This regional permit covers a category of activities which are substantially similar in nature and cause only minimal individual and cumulative environmental impacts. Some of the activities authorized by this regional permit may be authorized by one or more nationwide permits. Such activities are included in this regional permit for ease of use and consistency of action. Activities which do not comply with the provisions of this regional permit, and are not authorized by a nationwide permit, may require an individual permit.

Permittees: The permittees are any person or agency performing stream habitat improvement work in the permit area.

Permit Area: This regional permit is applicable to all perennial Waters of the United States within the State of New Mexico. A map showing the regional permit area is enclosed.

Scope of Work and Authorized Materials: Activities authorized by this regional permit are limited to the placement of fill material or excavation below the ordinary high water mark of the waterbody to construct stream habitat improvement structures in perennial waters within the State of New Mexico. The term "fill material" means any material used for the primary purpose of replacing an aquatic area with dry land or of changing the

bottom elevation of a water body. If no fill or excavation below ordinary high water takes place in the process of structure placement, and the structure does not fit the definition of "fill material", no 404 permit is needed for the work. For example, root wads, logs and brush bundles could be placed as bank cover and instream cover without any fill placement or excavation below ordinary high water.

Typical Structures: The following are examples of structures which are commonly used to improve stream habitat. Drawings enclosed are provided for illustration only.

Not all structures or fills, or combinations, are appropriate for all stream types. Project design and implementation by a qualified professional knowledgeable in stream hydraulics, hydrology and aquatic habitat design is recommended, along with a watershed management plan that addresses the causes of habitat deficiencies.

a. **Deflectors:** Deflectors are constructed to narrow and deepen the channel, and to direct the stream flow and increase velocity to create or enhance lateral scour pools and form a more meandering channel. They are usually low-profile, rising 6-12 inches above normal summer flows, and are below bank height. Deflectors are often constructed to direct flow toward naturally occurring cover, or to constructed cover, i.e. a log, if natural cover is not present. Deflectors may be constructed of logs or rocks or a combination of logs and rocks, and are usually triangular in shape (wing deflectors constructed of single logs can cause bank erosion during flood or high flows). A double wing deflector acts as a channel constrictor, directing the flow toward the center of the stream. Channel constrictors scour and deepen the streambed, provide overhead cover, and are usually placed in long, straight low-gradient stream stretches.

b. **Bank Cover:** Boulders, root wads, logs, brush bundles, etc. are installed to create an undercut bank effect, providing resting and security cover, and may protect the bank from erosion. Some structures may be covered with sod and planted with native vegetation for a natural appearance and added cover for fish.

c. **Instream Cover:** Boulders, irregular shaped logs, half-logs, root wads, etc. create mid-channel scour pools that provide feeding and resting sites, as well as lanes for fish movement. In addition, the scouring action may uncover gravels suitable for spawning habitat.

d. **Dams and Weirs:** Low-level dams can be constructed of logs, boulders or a combination of logs and rocks. Examples include K-dams

and wedge dams, vortex weirs and "W" weirs. These structures are usually used in a high-gradient streams to create scour pools and to provide low-velocity resting areas. Use of the upstream pointing Vortex and "W" rock weirs may decrease structure failure rate since they don't create scour holes that may destabilize the structure such as those created by downstream pointing dams.

e. Other structures: Other structures designed to improve stream habitat may be constructed under this regional permit, i.e. migration barriers which may be installed to protect existing native fish populations in headwater streams from non-native fish populations by blocking upstream fish migration.

Duration of the Regional Permit: This regional permit authorizes activities begun within 5 years and completed within 6 years after the date of issuance, unless the permit is revoked in the interim. A project completed while the regional permit was in effect would continue to be authorized even if the permit was revoked.

Notification Procedures: The applicant must first notify the Corps of Engineers in writing. Work cannot proceed until the Corps of Engineers has provided written approval to the applicant. The applicant must provide the following information:

- a. A written request to conduct work under the regional permit, including the applicant's name, address, and telephone numbers.
- b. Project location including name of waterway, nearest town, county, and section, township, and range.
- c. A complete description of the work, including a clear statement of project objectives, what species is targeted and what portion of the species' life cycle requires the structure. Describe material to be excavated or used as fill, including composition, source, and volume in cubic yards, and area of waterway to be excavated or filled. Indicate stream parameters such as stream size, slope, approximate design velocities, existing uses i.e. recreational boating, any monitoring and maintenance plans, and details of how structures will be anchored.
- d. Drawings or sketches on 8-1/2" x 11" paper showing the project

location, the plan or top view of all work with structure dimensions, and cross-sectional or side views of the proposed work. The plan view should indicate the ordinary high water mark, width of the stream at bankfull discharge, bank slope, approximate configuration of the stream channel for a reach 100 yards upstream and downstream of the proposed project site, and the boundaries of any wetlands, islands or bars, areas of deciduous woody riparian vegetation, and side channels. Copies of the example drawings may not be used.

e. A certification statement that the proposed work will comply with all conditions of the regional permit.

The above information should reference Regional Permit No. NM-97-00476 and be sent to:

District Engineer
Albuquerque District, US Army Corps of Engineers
ATTN: Regulatory Branch
4101 Jefferson Plaza, NE
Albuquerque, NM 87109-3435
Telephone: (505)342-3283

The Corps of Engineers will coordinate the notification with other Federal and state agencies to solicit their views on the environmental effects of the proposed work. Within 5 days of receipt of a request to use the regional permit, the Corps will transmit a copy of the application to the Federal and State resource and regulatory agencies in New Mexico for their review and comment. After considering agency comments, the Corps of Engineers may add special conditions to ensure that adverse environmental impacts are minimal, or may decide that an individual permit application is required. Within 30 days of receiving a completed notification, the Corps of Engineers will review the proposal and inform the applicant if the work may proceed under the authorization of this regional permit or will require an individual permit.

Conditions of the Regional Permit: All activities authorized under this regional permit are subject to the following conditions:

a. **Special Conditions.** The permittee must comply with any case-specific special conditions which may be added by the Corps of Engineers

to a specific activity.

b. Water Quality

1. Revegetate. All areas above the ordinary high water mark disturbed by construction will be revegetated with native vegetation to prevent erosion.
2. Restriction of Construction Period. Construction operations will be conducted during low flow periods.
3. Pollution. Heavy equipment use in the stream or water body will be avoided whenever possible. If it is necessary to operate within the stream, all equipment will be steam cleaned prior to use, and inspected at regular intervals to avoid petrochemical leaks or spills into the waterway.
4. Wetlands. The permittee shall avoid adverse impacts to wetlands from project implementation, including construction and maintenance.
5. Erosion and Siltation Controls. Work will be conducted in a manner that will minimize turbidity of the water in the work area. Appropriate erosion and siltation controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark must be permanently stabilized.
6. Water Supply Intakes. No discharge of dredged or fill material may occur in the proximity of a public water supply intake except where the discharge is for repair of the public water supply intake structures or adjacent bank stabilization.
7. Suitable Material. No discharge of dredged or fill material may consist of unsuitable material (e.g., concrete rip rap containing any metal (exposed or unexposed), trash, debris, car bodies, asphalt, etc.) and material discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

c. Fish and Wildlife.

1. Spawning Areas. Discharges into spawning areas during spawning seasons will be avoided.

2. Migratory Waterfowl. Discharges into breeding and nesting areas for migratory waterfowl will be avoided.

3. Aquatic Life Movements. No activity may impede or prevent the movement of those species of aquatic life indigenous to the water body, including those species which normally migrate through the area, except for the creation of in-stream fish barriers constructed to protect reaches of streams that harbor or will harbor populations of native species from invasion by non-native species.

4. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System; or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status; unless the appropriate Federal agency, with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely effect the Wild and Scenic River designation, or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service.)

5. Endangered Species.

(a) No activity is authorized which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act, or which is likely to destroy or adversely modify the critical habitat of such species. Non-federal permittees shall notify the District Engineer if any listed species or critical habitat might be affected or is in the vicinity of the project, and shall not begin work on the activity until notified by the District Engineer that the requirements of the Endangered Species Act have been satisfied and that the activity is authorized.

(b) Authorization of an activity by a regional permit does not authorize the "take" of a threatened or endangered species as defined under the Federal Endangered Species Act. In the absence of separate authorization (e.g., an ESA section 10 Permit, a Biological Opinion with

"incidental take" provisions, etc.) from the U.S. Fish and Wildlife Service or the National Marine Fisheries Service, both lethal and non-lethal "takes" of protected species are in violation of the Endangered Species Act. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. Fish and Wildlife Service and National Marine Fisheries Service or their world wide web pages at

<http://www.fws.gov/~r9endspp/endspp.html> and
http://kingfish.ssp.mnfs.gov/tmcintyr/prot_res.html
respectively.

d. Engineering

1. All structures must be properly anchored to prevent washing away during high flows.

2. Erosion. Placement of habitat improvement structures will not cause excessive lateral scour, stream bed degradation or sediment aggradation in the stream channel that results in destabilization of the stream bed and banks in the project area.

3. Travel or Traffic. Placement of habitat improvement structures will not block or create a hazard to systems used for travel or traffic movement, including recreational boating such as rafting, kayaking and canoeing.

4. Remove Temporary Fills. All temporary fills will be removed in their entirety immediately upon project completion, and the affected areas returned to their preexisting elevation.

5. Proper Maintenance. Any structure or fill authorized shall be monitored and properly maintained, including maintenance to ensure public safety, and in accordance with the terms and conditions of this permit. Failed structures shall be completely removed immediately to prevent erosion and safety hazards.

6. Obstruction of High Flows. Discharges must not permanently restrict or impede the passage of normal or expected high flows or cause the relocation of the water.

7. Impoundments. Permanent impoundments are not authorized by this regional permit.

e. **Tribal Rights.** No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

f. **Historic Properties.** No activity which may affect historic properties listed, or eligible for listing, in the National Register of Historic Places is authorized, until the DE has complied with the provisions of 33 CFR part 325, appendix C. The applicant must notify the District Engineer if the authorized activity may affect any historic properties listed, determined to be eligible, or which the applicant has reason to believe may be eligible for listing on the National Register of Historic Places, and shall not begin the activity until notified by the District Engineer that the requirements of the National Historic Preservation Act have been satisfied and that the activity is authorized. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places (see 33 CFR 330.4(g)).

g. **Inspection.** Representatives from the Corps of Engineers must be allowed to inspect the authorized activity at any time deemed necessary to ensure that it is being, or has been accomplished, in accordance with the terms and conditions of this permit.

Further Information:

a. **Water Quality Certification:** In accordance with Section 401 of the Clean Water Act, a water quality certification must be obtained from the appropriate state or tribal government prior to construction of the proposed activity. On non-tribal lands, the applicant must contact the New Mexico Environment Department, Surface Water Quality Bureau, P.O. Box 26110, Santa Fe, New Mexico 87502-6110, (505) 827-0106, for water quality approval. On certain tribal lands, the applicant should contact the appropriate tribal authority to obtain a water quality certification. Tribes which have water quality certification programs in New Mexico are Sandia Pueblo, Santa Clara Pueblo, Picuris Pueblo, San Juan Pueblo, Isleta Pueblo, Nambe Pueblo and Pojoaque Pueblo. Additional tribes may acquire water quality certification authority in the future. The certifying agency for other tribal lands in New Mexico, except Navajo Nation lands, is

EPA, Region 6, Dallas, Texas. The certifying agency for Navajo Nation lands is EPA, Region 9, in San Francisco, California. You may contact the Corps to determine the appropriate water quality certification authority.

b. Congressional Authorities: This regional permit is authorized pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344).

c. Other Laws: The permittee is responsible for obtaining all other Federal, state, or local authorizations required by law.

d. Limits of this Authorization: This regional permit does not grant any property rights or exclusive privileges; does not authorize any injury to the property or rights of others; and does not authorize interference with any existing or proposed Federal project.

e. Limits of Federal Liability: In issuing this permit, the Federal Government does not assume any liability for the following: damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes; damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest; damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activities authorized by this permit; design or construction deficiencies associated with the permitted work; or damage claims associated with any future modification, suspension, or revocation of this permit.

f. Reevaluation of Permit Decision: The Corps of Engineers may reevaluate its decision on this regional permit or individual activities authorized under this regional permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following: the permittee fails to comply with the terms and conditions of this regional permit; the information provided by the permittee in support of their notification proves to have been false, incomplete, or inaccurate; or significant new information surfaces which the Corps of Engineers did not consider in reaching the original public interest decision. Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for

the issuance of an administrative order requiring the permittee to comply with the terms and conditions of the regional permit and for the initiation of legal action where appropriate. The permittee will be required to pay for any corrective measures ordered by the Corps of Engineers, and if fails to comply with such directive, the Corps of Engineers may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill the permittee for the cost.

g. Renewal of the Regional Permit: This regional permit may be reviewed for reissuance prior to its expiration date. Any reissuance will be processed in accordance with 33 CFR 325.2 including a public notice and environmental procedures and documentation required by the National Environmental Policy Act of 1969.

Lloyd S. Wagner
Lieutenant Colonel, EN
District Engineer

Enclosures

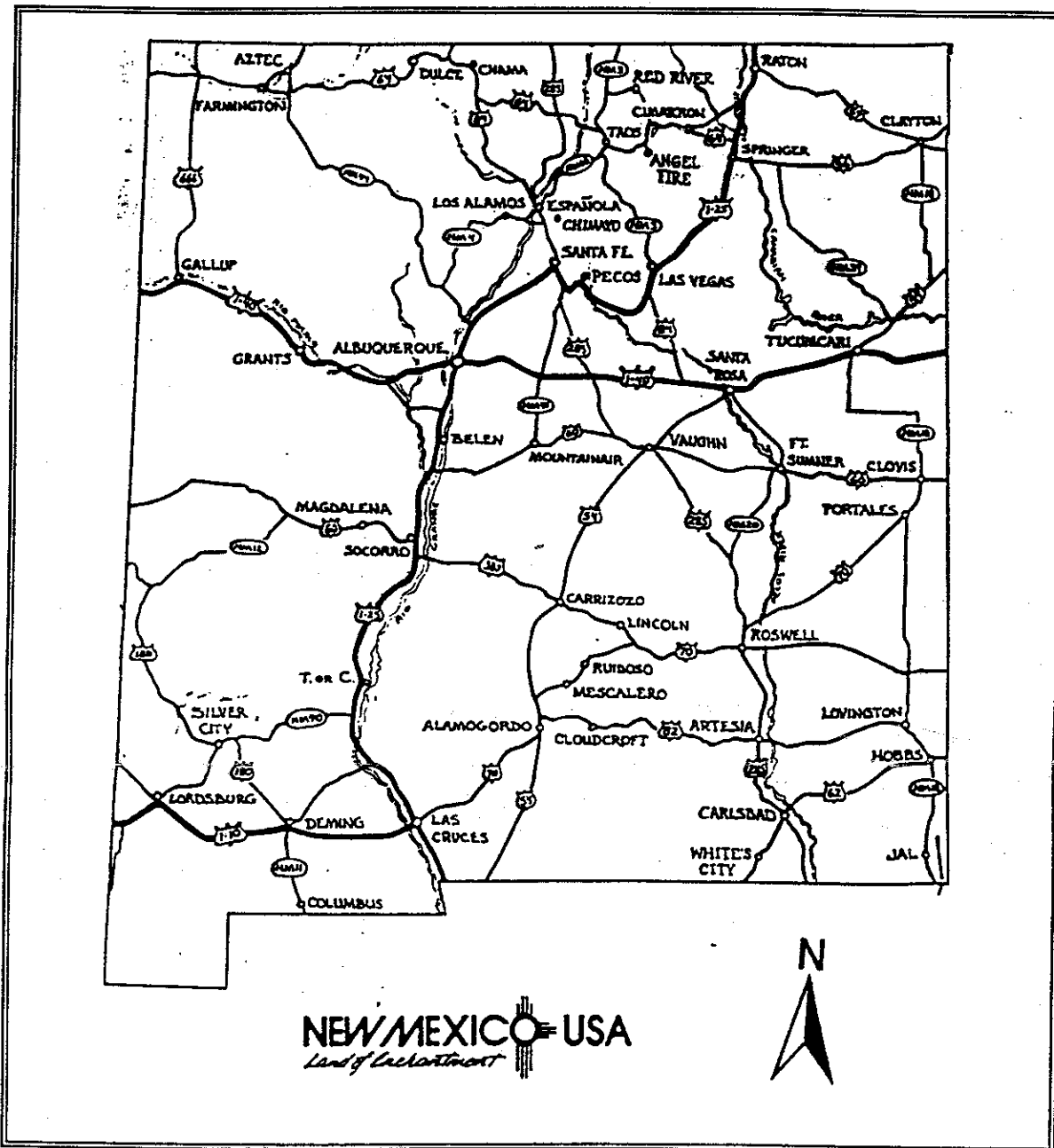


Fig 1: Location map

Regional Permit for Stream Habitat
Improvement Structures in Waters of
the United States in New Mexico.

Action No. NM-97-00476

Sheet 1 of 3

January 9, 1998

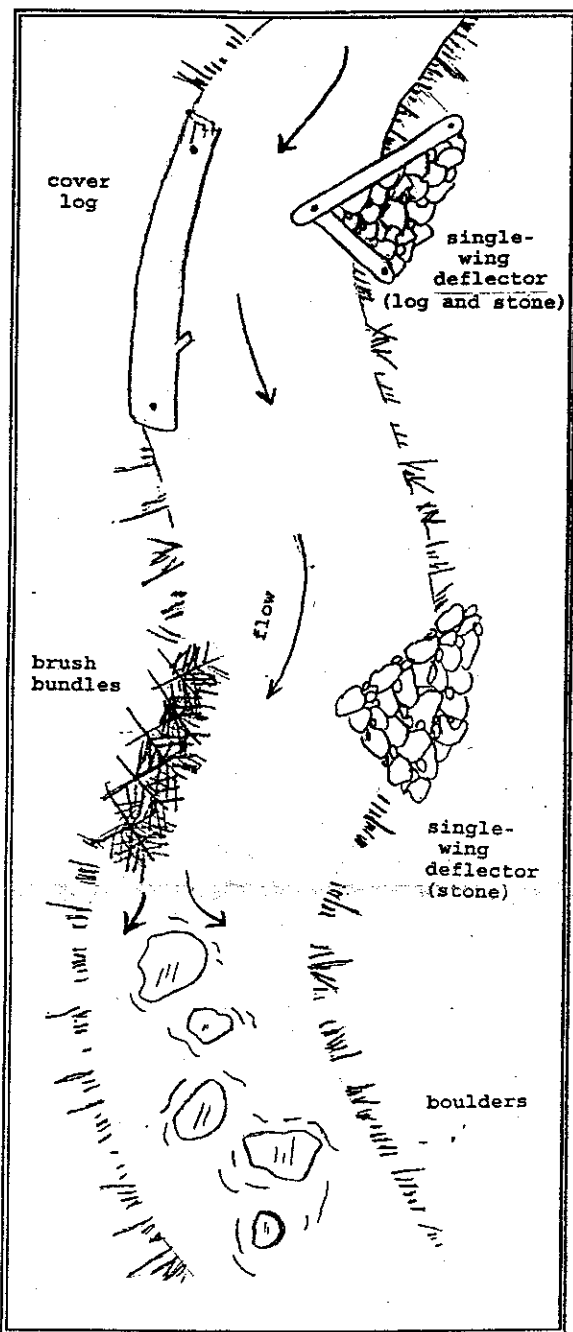


Fig 2: Single-wing deflector, cover logs, brush bundles, and boulders

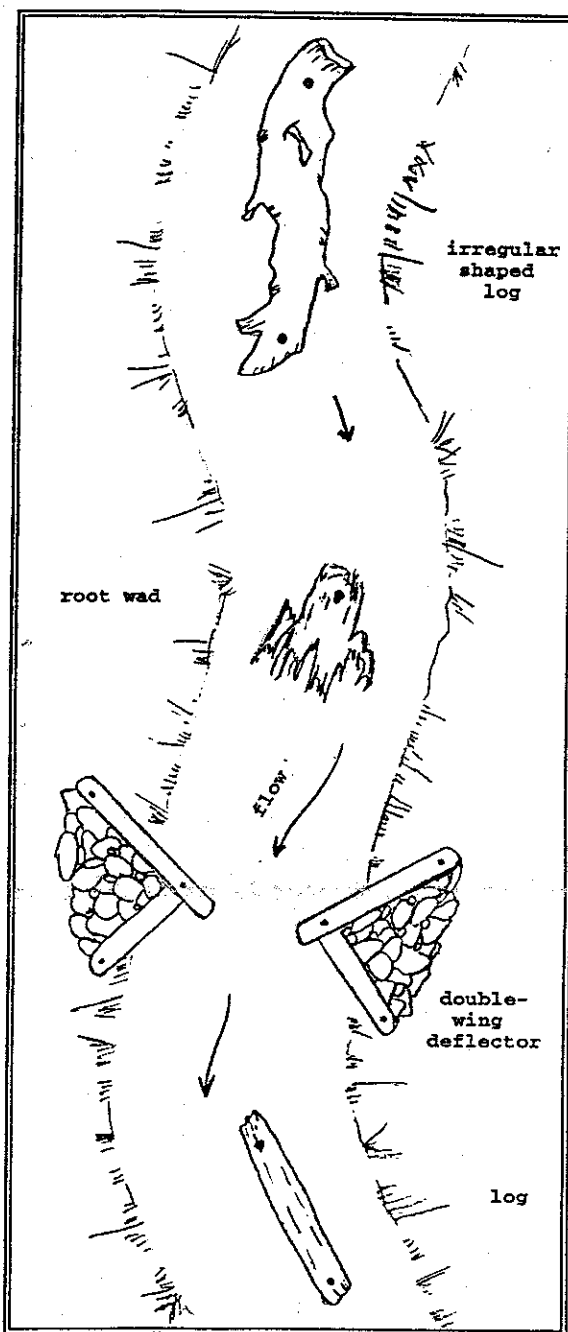


Fig 3: Double-wing deflector, instream-placed logs and root wads

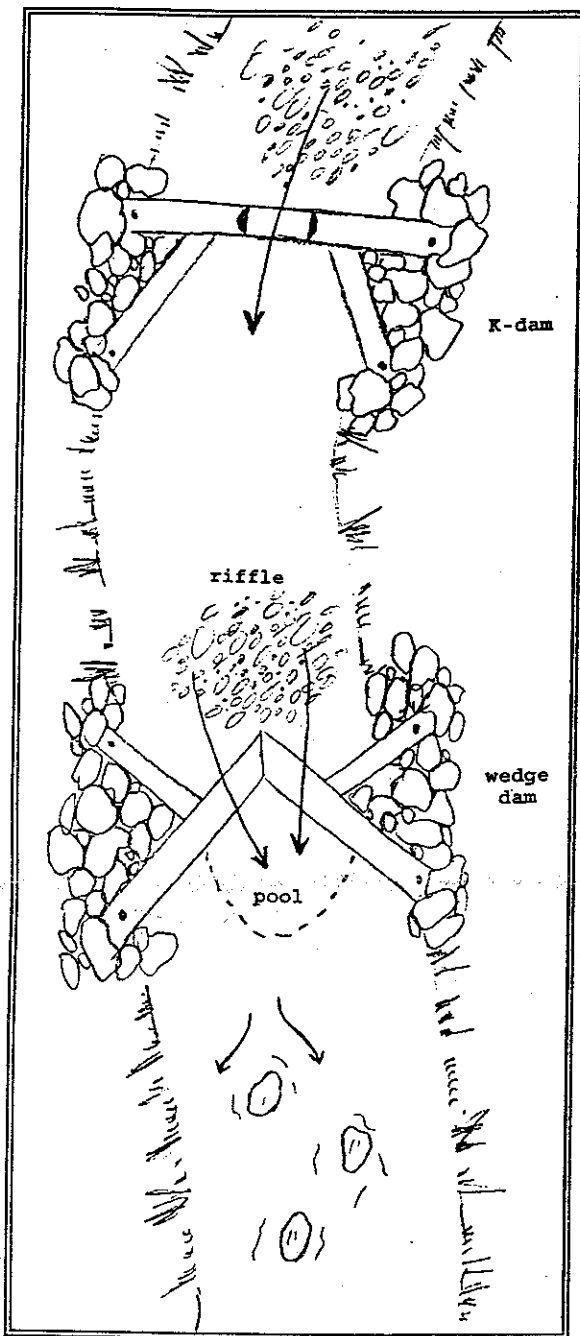


Fig 4: K-dam and wedge dam

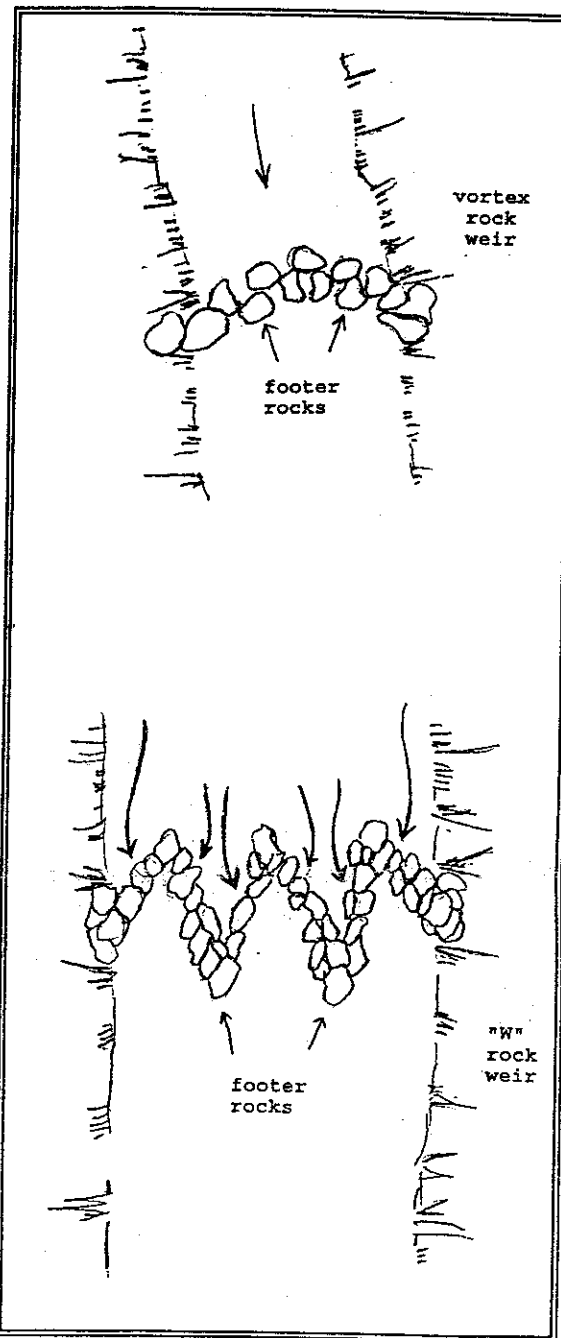


Fig 5: Vortex and "W" weiers